



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,210	12/27/2000	Thomas R. Schmutz	6785-126	5286
39207	7590	11/17/2004	EXAMINER	
SACCO & ASSOCIATES, PA P.O. BOX 30999 PALM BEACH GARDENS, FL 33420-0999			LEE, JOHN J	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/749,210	Applicant(s) SCHMUTZ, THOMAS R.	
	Examiner JOHN J LEE	Art Unit 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4-16 and 20 is/are allowed.
- 6) ☒ Claim(s) 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 17 – 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Leslie (US Patent number 5,023,930) in view of Baker et al. (US Patent number 6,377,612).

Regarding **claim 17**, Leslie discloses that a configurable base transceiver station (12 in Fig. 1) in a communication system (Fig. 1) having the base transceiver station located within a home cell (10 in Fig. 1) and a plurality of substantially adjacent cells, with at least one of said adjacent cells (Fig. 1) having a repeater (16 in Fig. 1) located (Fig. 1 and column 6, lines 41 – 59). Leslie teaches that a transmitter for transmitting traffic (voice channels) and control signals (control channels) to the repeater (16 in Fig. 1) (column 7, lines 42 – 68 and Fig. 1). Leslie teaches that a receiver (12 in Fig. 1) for receiving a backhaul signal (antenna (18) through antenna (14) in Fig. 1) from repeater (16 in Fig. 1) (column 6, lines 41 – 59), wherein the backhaul signal (antenna (18) through antenna (14) in Fig. 1) is transmitted at one of a plurality of discrete power levels indicative of a power level (receiving power levels from the mobile stations to booster and the booster retransmits the selected signal strength (not above minimum power levels) to cell cite (base station)) measured from an uplink communication channel

(channels from mobile stations) at the repeater (16 in Fig. 1) (see column 19, lines 40 – column 20, lines 4, Fig. 1, 4, and column 8, lines 37 - 59). Leslie also teaches that a processor (66 in Fig. 1) that is programmed to selectively configure the plurality of discrete power levels (the stored program control unit provides to overall control for booster and also measures the receiving signal strength levels on each channel (from mobile stations) and determines the channels which are not above minimum power levels and retransmits the selected signal strength to cell cite) at which the repeater will transmit the signal (see Fig. 1, 2, column 10, lines 3 – 56, and column 8, lines 37 – 59).

However, Leslie does not specifically disclose the limitation “base transceiver comprises a processor that is programmed to selectively configure the plurality of discrete power levels at which the repeater will transmit the backhaul signal”. However, Baker discloses the limitation “base transceiver comprises a processor (792 in Fig. 7) that is programmed to selectively configure the plurality of discrete power levels (selectively output power control for maintaining the appropriate power level) at which the repeater will transmit the backhaul signal” (Fig. 7, 9, column 2, lines 1 – 35, and column 8, lines 54 – column 9, lines 41, where teaches processor of base transceiver station performs selectively output power control for maintaining the appropriate power level from repeater station transmitting the signal). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Leslie system as taught by Baker, provide the motivation to achieve more efficient power control in wireless communication system.

Regarding **claim 18**, Leslie discloses that the uplink communication channel is a channel containing signals from a mobile transceiver unit (Fig. 1 and column 8, lines 37 – 59).

Regarding **claim 19**, Leslie discloses that the processor is further programmed to process the indicated power level to control the power level of the mobile transceiver unit (for example, handoff situation see column 11, lines 62 – column 12, lines 9) based on the indicated power level (Fig. 1, 2, column 10, lines 3 – 56, and column 8, lines 37 – 59).

Allowable Subject Matter

3. Claims 1, 2, 4 – 16, and 20 are allowed.

Claims 1, 2, 4 – 16, and 20 are allowable over the prior art of record because a search does not detect the combined claimed elements as set forth in the claims 1, 2, 4 – 16, and 20.

As recited in independent claims 1, 10, 13, 20, none of the prior art of record teaches or fairly suggests that transmitting a backhaul signal from said repeater to said base transceiver station on a backhaul communication link, wherein said backhaul signal is selectively transmitted at one of a plurality of discrete power levels, each of said discrete power levels representing a coded indication of said power levels as measured by said repeater, and the processor is further programmed to decrease the power level of the uplink channel if the backhaul signal is transmitting at a first power level, maintain the power level of the uplink channel if the backhaul signal is transmitting at a second power

Art Unit: 2684

level, increase the power level if the backhaul signal is transmitting at a third power level, and request that the uplink channel handoff to another repeater or base transceiver station if the backhaul signal is transmitting at a fourth power level, and together with combination of other element as set forth in the claims 1, 2, 4 – 16, and 20. Therefore, claims 1, 2, 4 – 16, and 20 are allowable over the prior art of records.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fujiwara (US Patent number 4,794,649) discloses Radio Communication System with Power Saving Disablement Prior to Call Handling Processes.

Bender et al. (US Patent number 6,269,250) discloses Controlling Transmit Power Thresholds Based on Classification of Wireless Communication Subscribers.

Matsumiya et al. (US Patent number 6,704,298) discloses Repeater Amplifier Apparatus.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label
"PROPOSED" or "DRAFT").

Art Unit: 2684

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(703) 306-5936**. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Nay Aung Maung**, can be reached on **(703) 308-7745**. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L.
November 8, 2004

John J Lee


NAY MAUNG
SUPERVISORY PATENT EXAMINER